

Unlucky Cohorts? Income and Consumption effects of the 1995 and 2009 Economic Downturns in Mexico

Iván Mejía-Guevara*

Isalia Nava-Bolaños

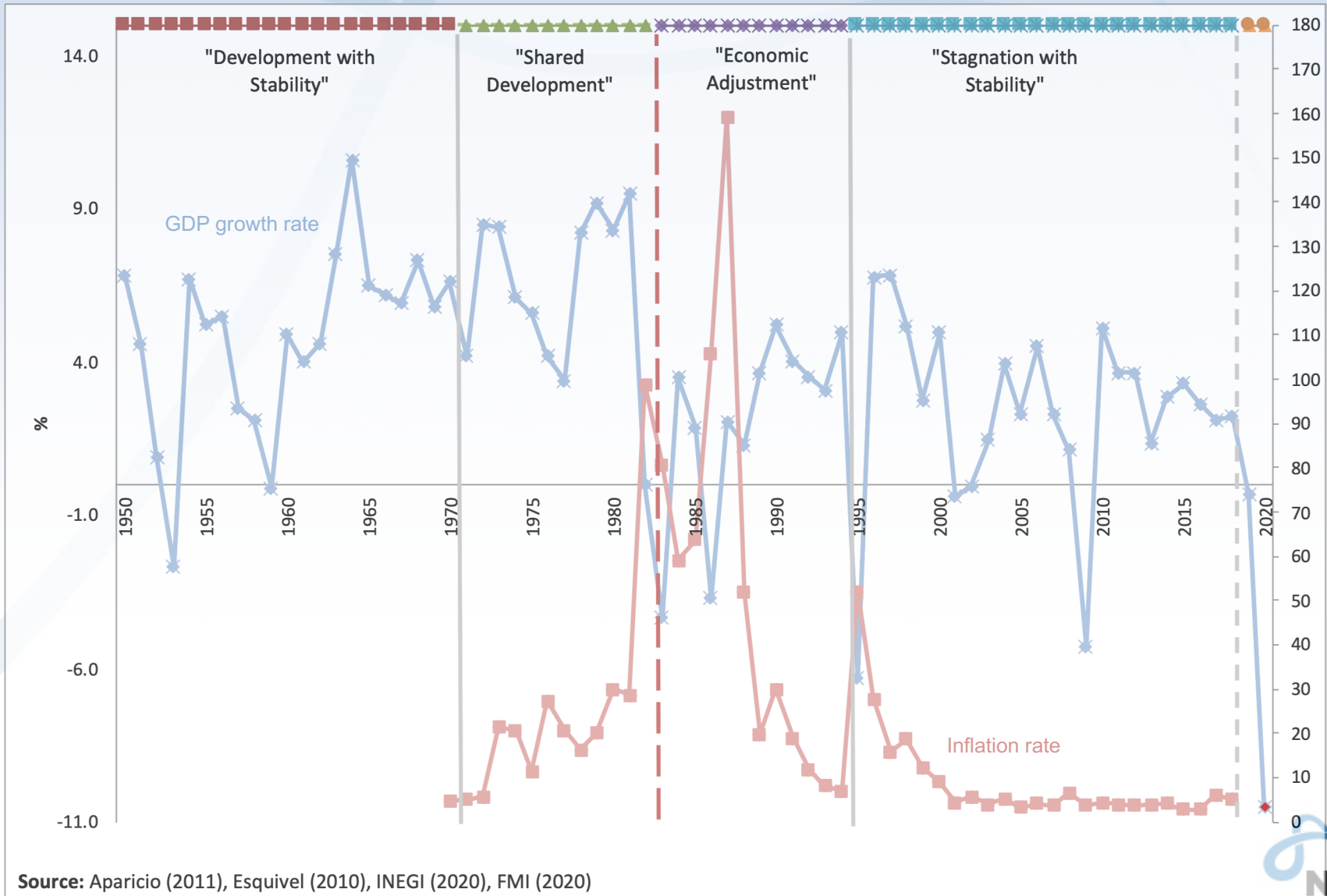
René F. Lazcano

Elvira Cedillo

[*imejia@stanford.edu](mailto:imejia@stanford.edu)

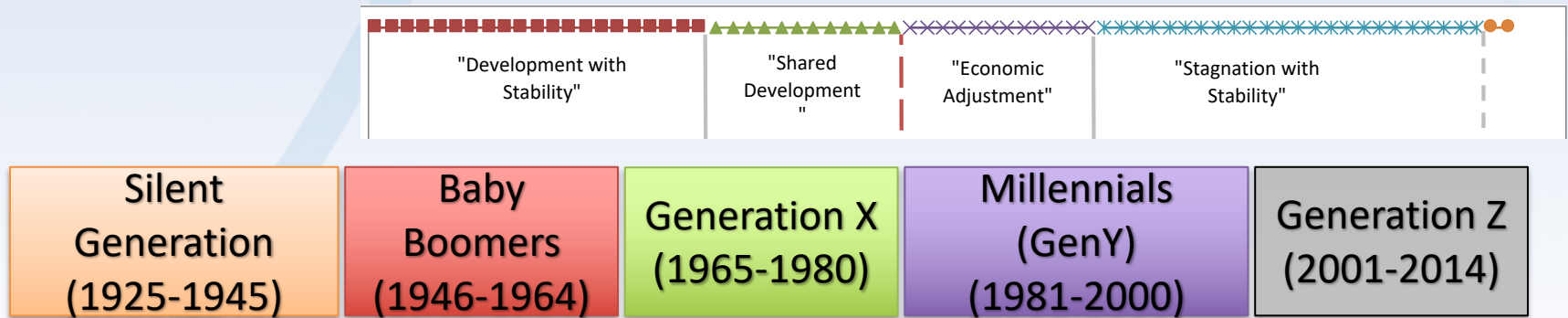
Stanford University School of Medicine

Motivation: Phases of Economic Development

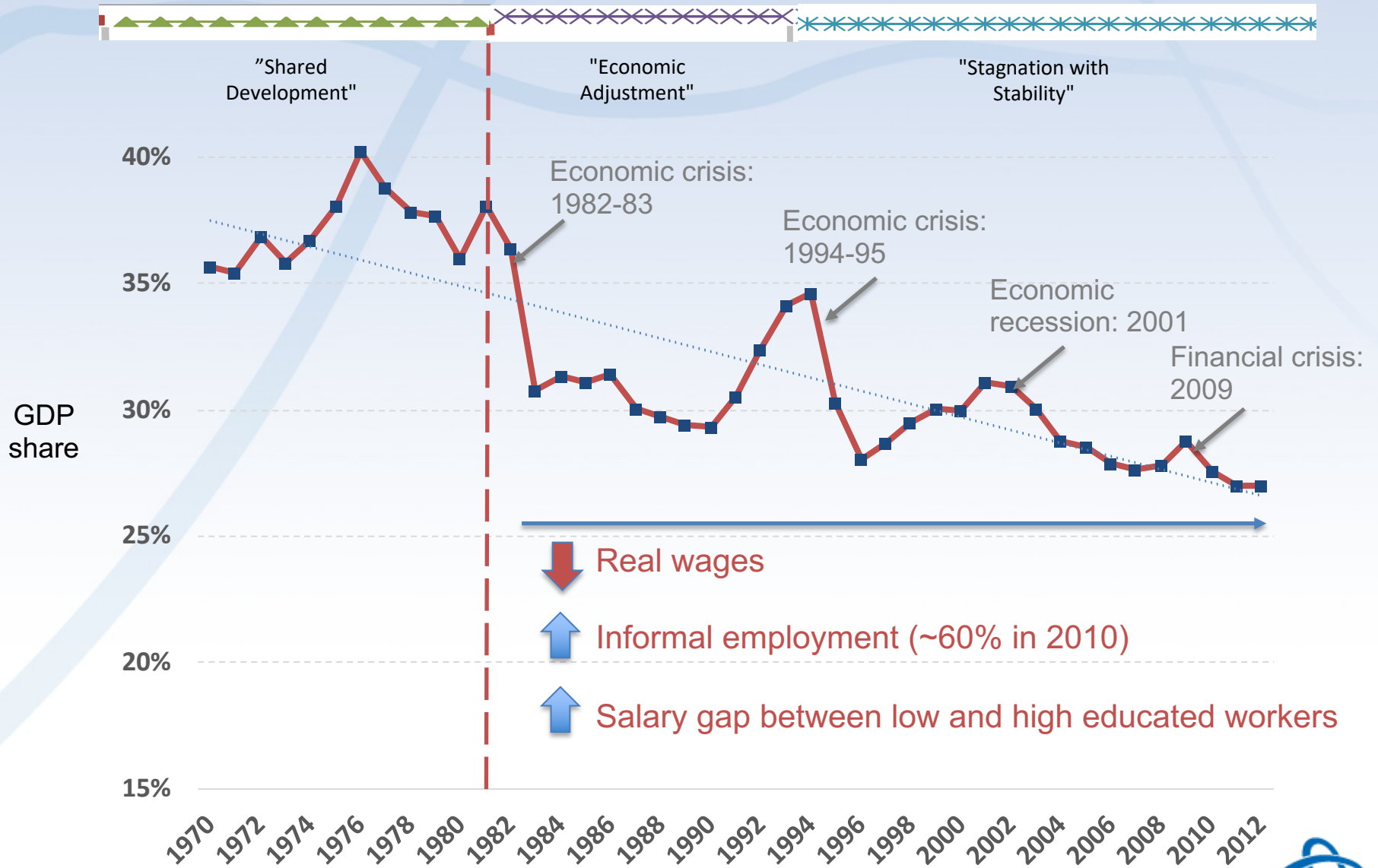


Source: Aparicio (2011), Esquivel (2010), INEGI (2020), FMI (2020)

Economic Development & Birth Cohorts



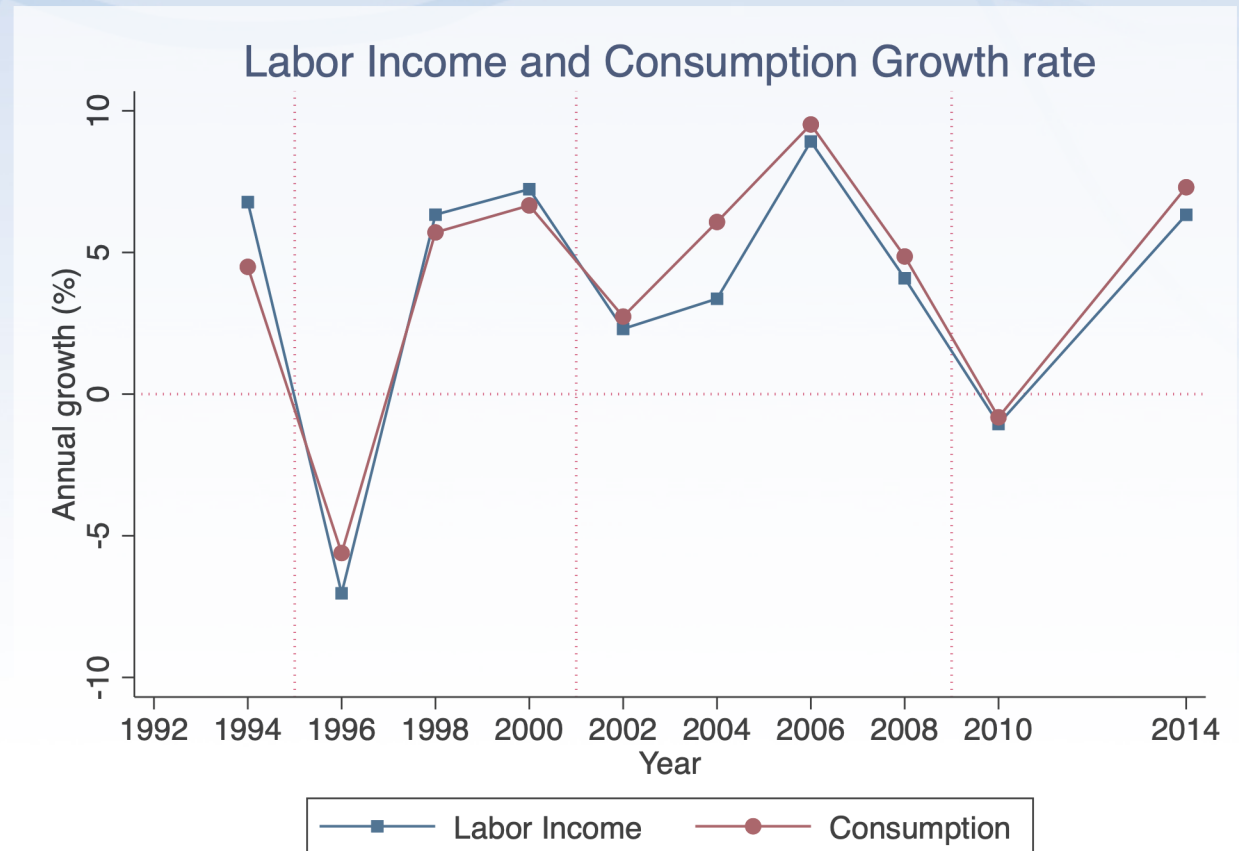
Unlucky Cohorts? Compensation of Employees



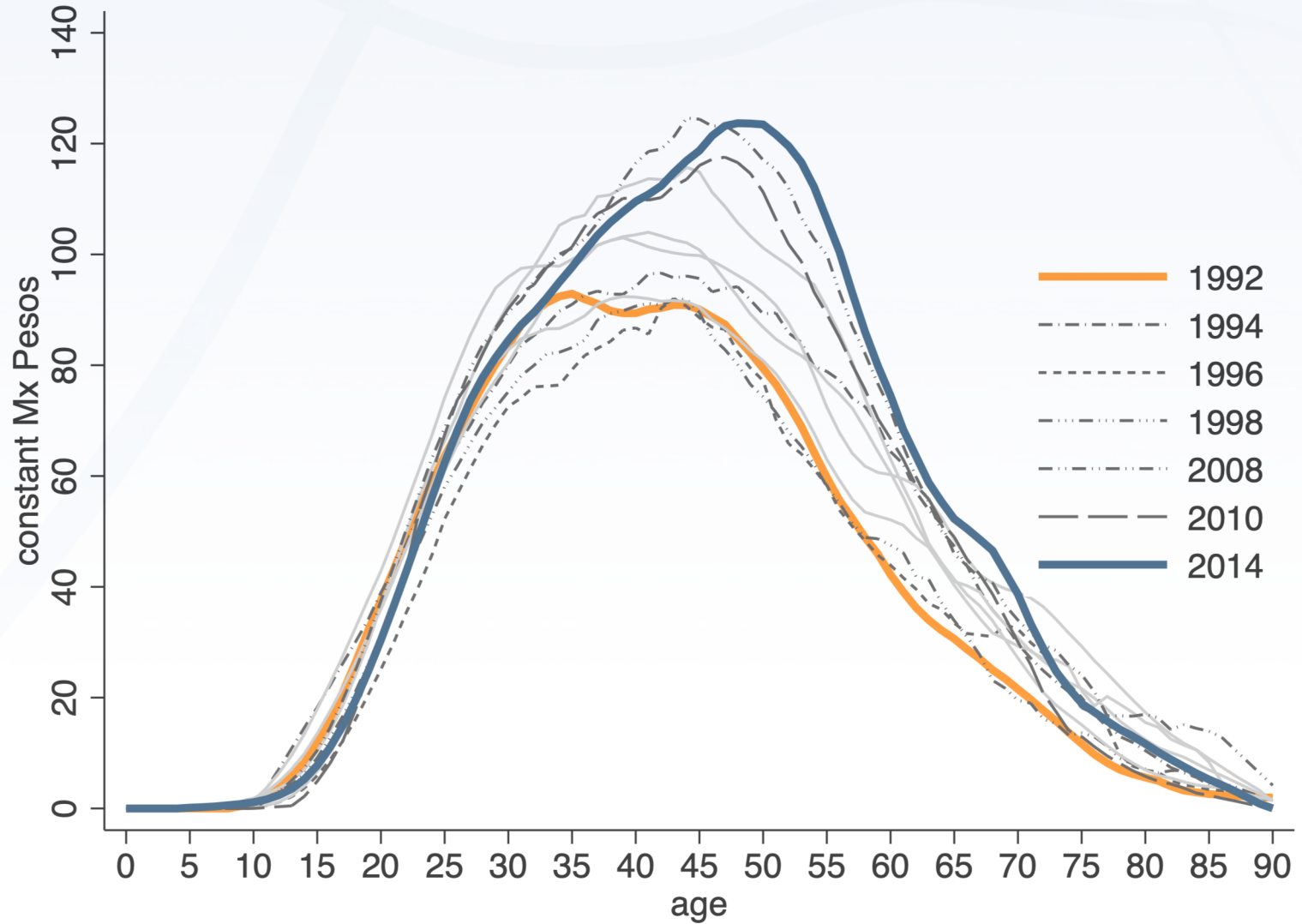
Source: Samaniego, 2014 with data from OECD.Stat

NTA Data: Labor Income & Consumption

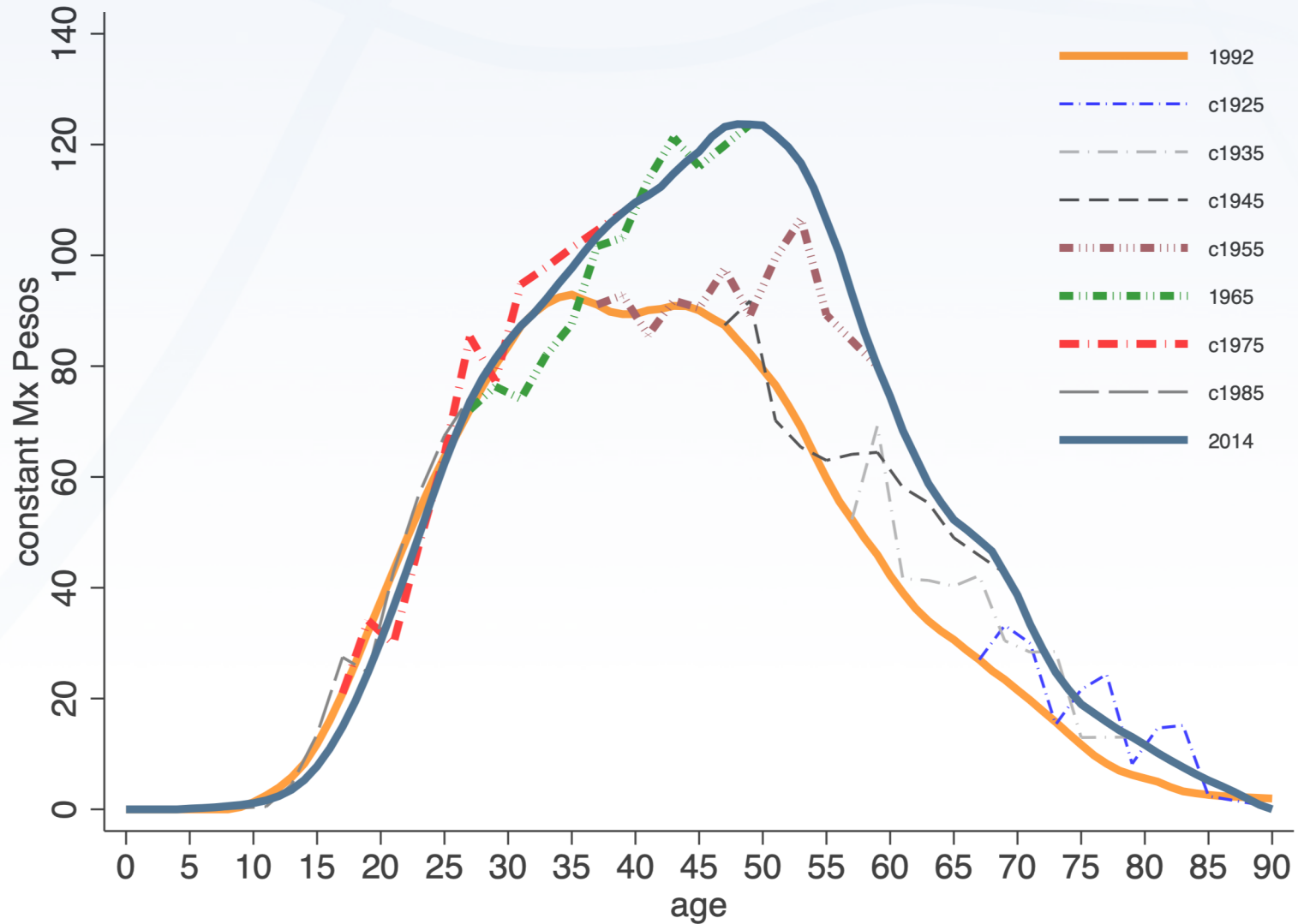
- Biennial Cross-sectional Labor Income and Consumption
NTA estimates:
1992-2014
(excludes 2012)
(in constant Mx Pesos,
2011=100)



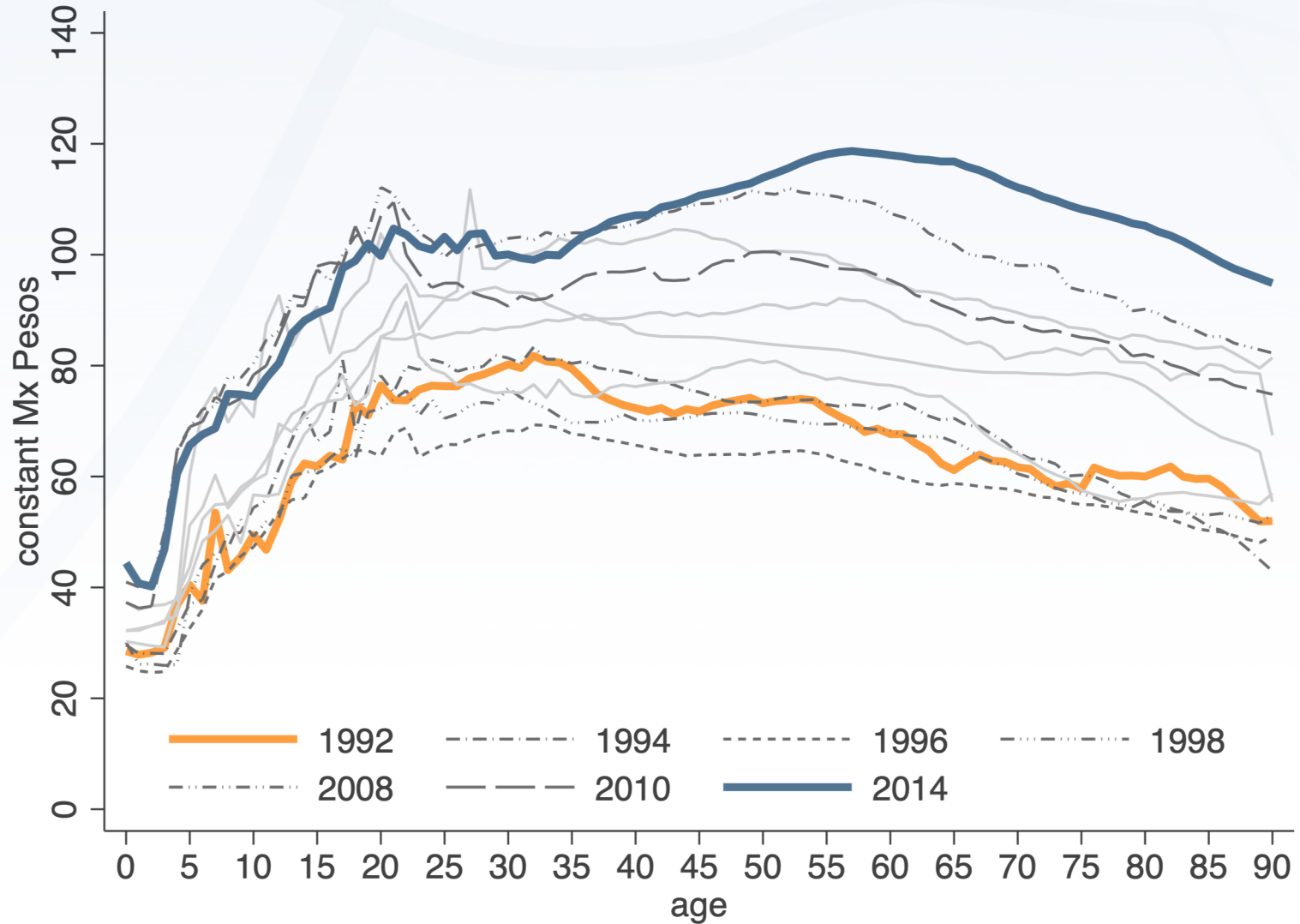
Labor Income: Age-Period



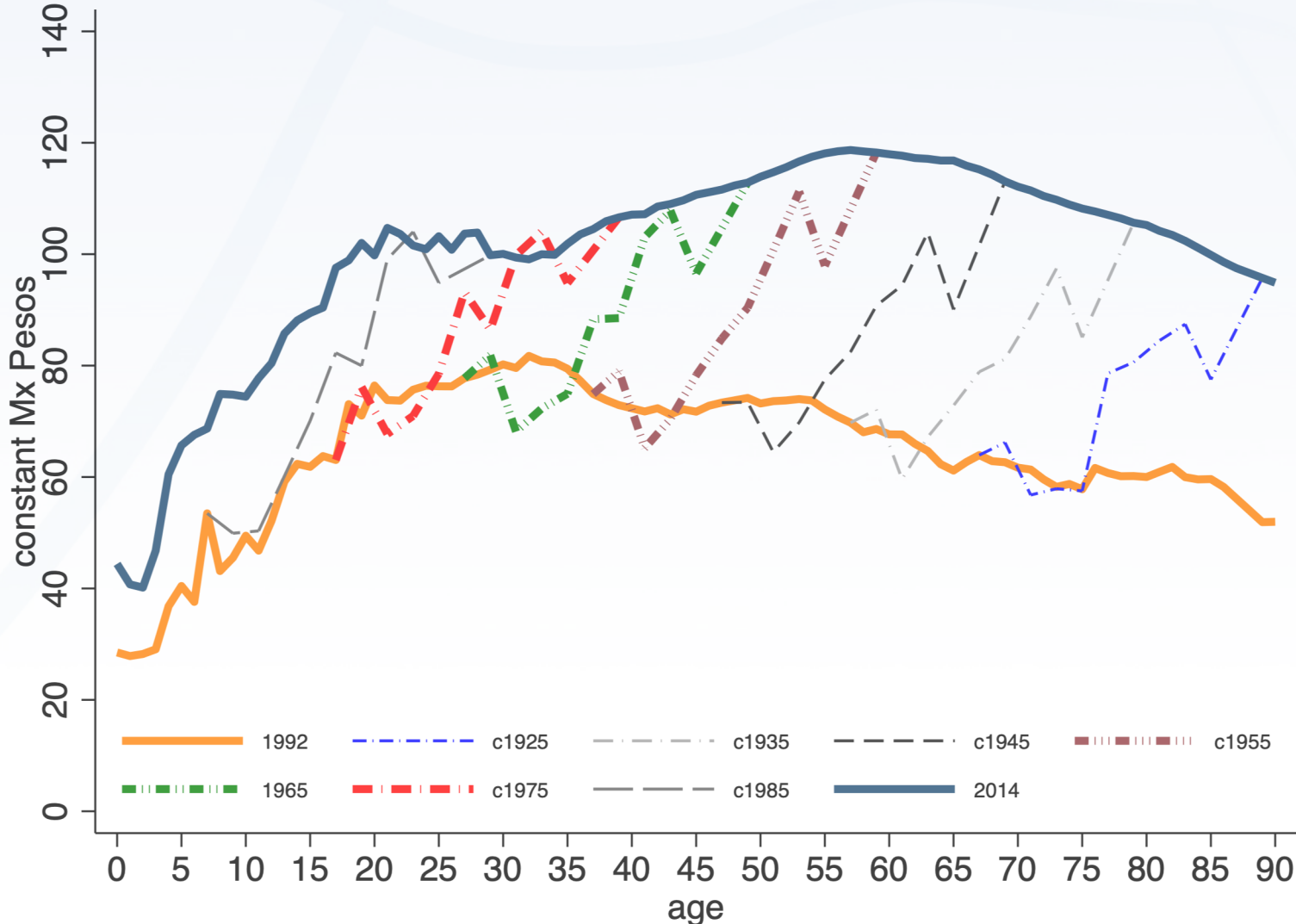
Labor Income: Age-Cohort



Total Consumption: Age-Period



Total Consumption: Age-Cohort

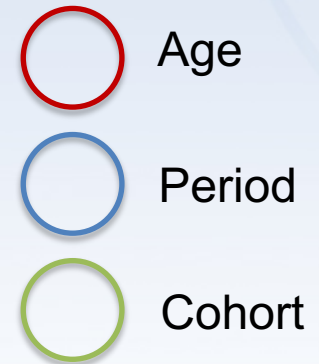


APC Linear Dependency & Methods

- Identification Problem: Age = Period – Cohort

- Median Polish (MP)

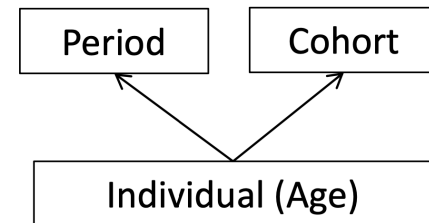
- Step 1: $Y_{ijk} = \mu + \alpha_i + \beta_j + \varepsilon_{ij}$
- Step 2: $\hat{\varepsilon}_r = \mu_k + \gamma_k + e_k$



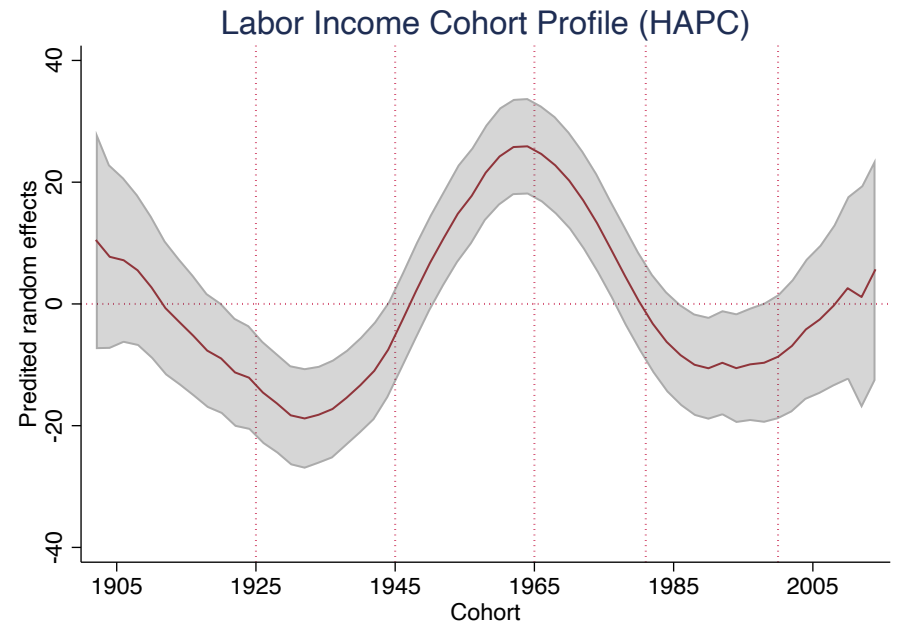
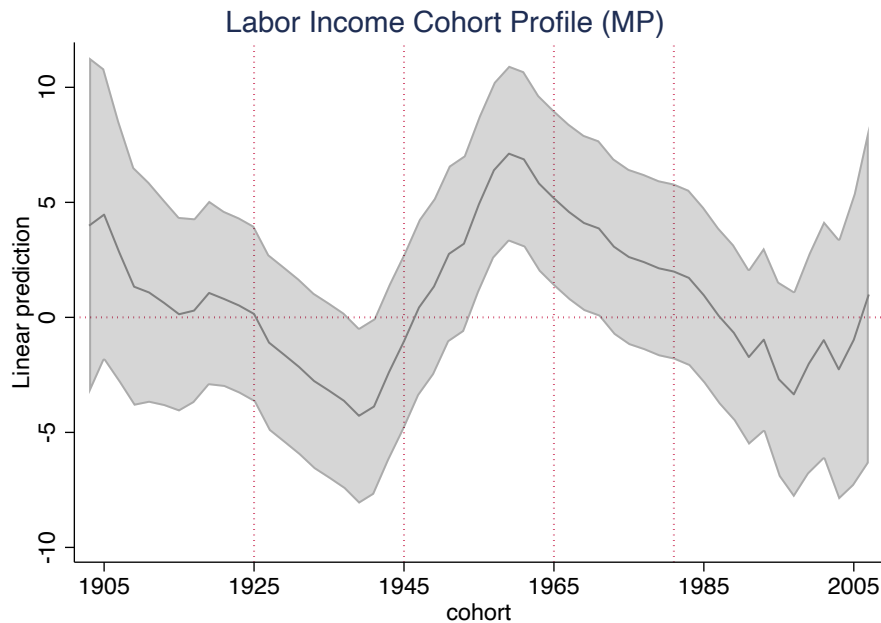
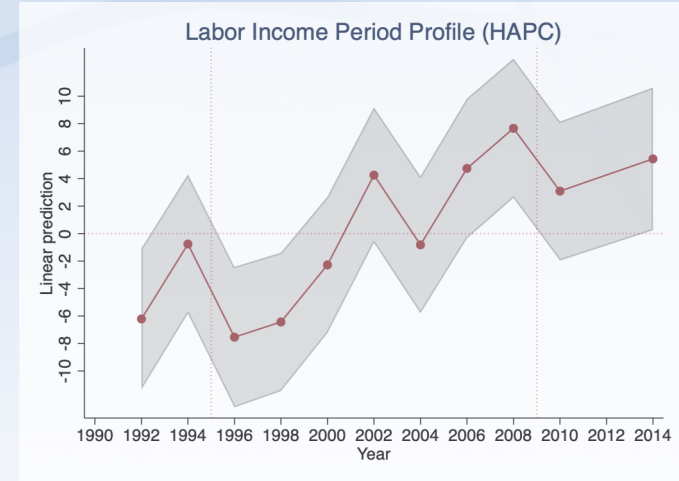
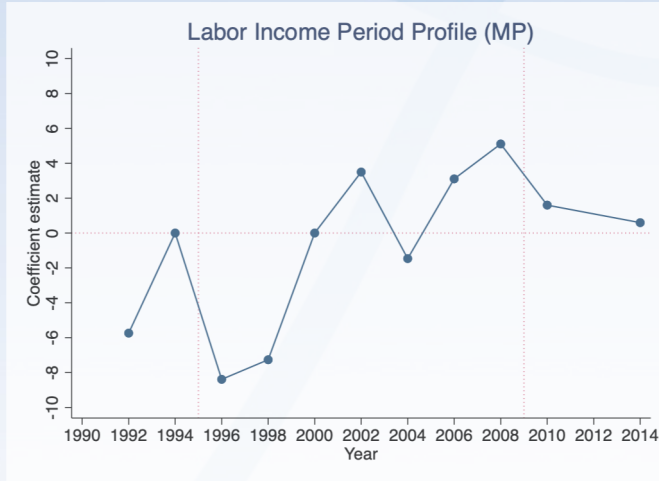
- Hierarchical APC (HAPC)

- 2-level cross-classified random intercepts model:

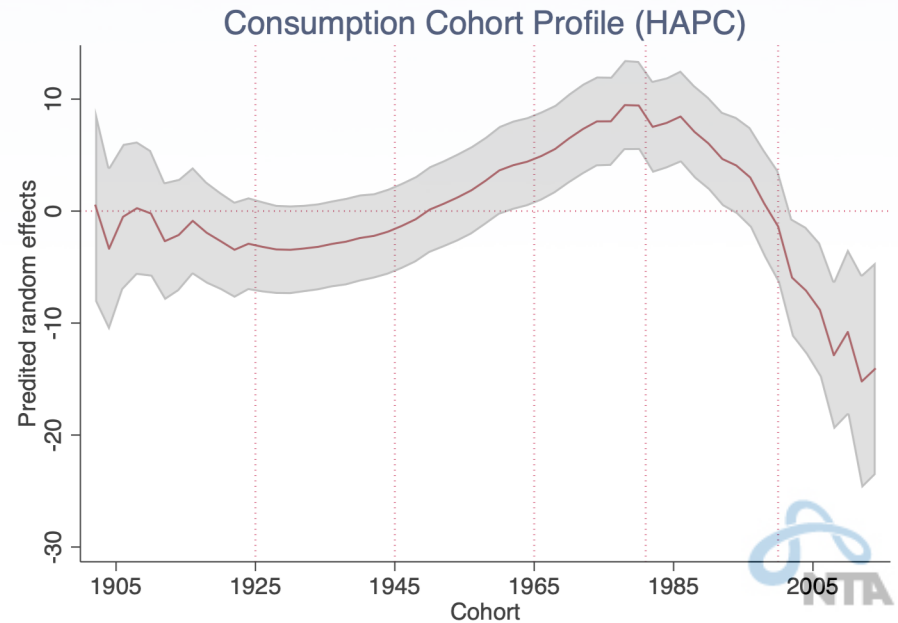
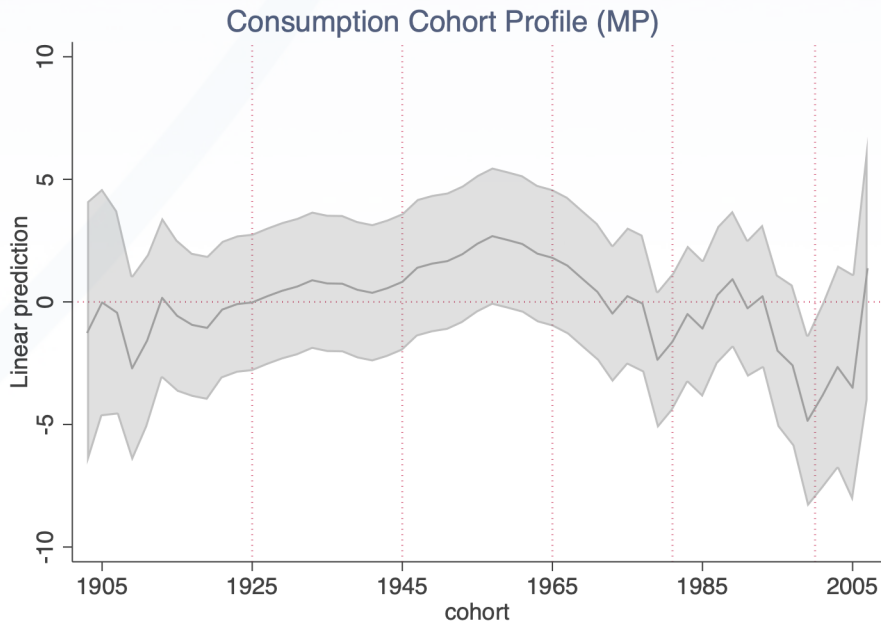
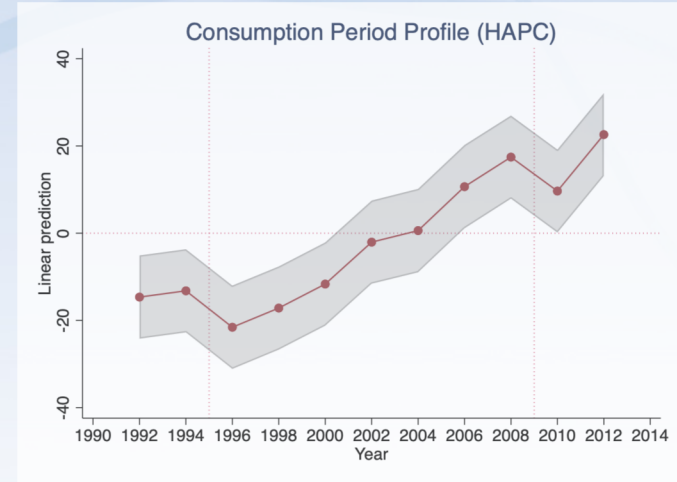
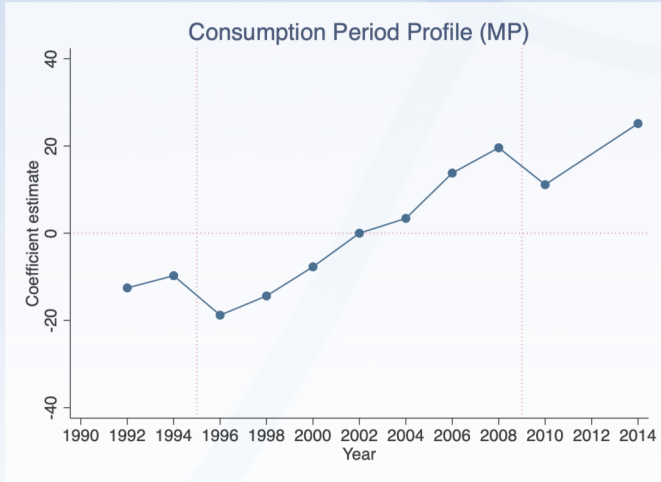
$$Y_{ijk} = \underbrace{\mu_0 + \alpha_{ijk}}_{\text{Fixed-effects}} + \underbrace{\beta_{0j} + \gamma_{0k}}_{\text{Random-effects}} + \varepsilon_{ijk}$$



Labor Income: APC Profiles



Consumption: APC Profiles



Work in Progress

- Further sensitivity analysis (Deaton & Paxson APC)
- Include 2012 NTA estimates
- Educational expansion & work status across generations

Thank you!